

## CLAIMS

1. A method for charging a battery (16) from a direct-current source liable to significant fluctuations, comprising the steps of:

- 5 - progressively charging a storage capacitor (14) at a voltage that is higher than the nominal voltage of the battery (16),  
- detecting a predetermined voltage threshold over the terminals of said storage capacitor (14), and  
- discharging said storage capacitor (14) into said battery (16), said  
10 discharging being controlled by said threshold detection.

2. The method of claim 1, implemented for charging a battery from a photovoltaic cells source.

- 15 3. The method of claim 1, implemented for electrically supplying a lighting equipment for a vehicle, from a bicycle dynamo-electric generator.

4. A device for charging a battery (16) from a direct-current source  
20 liable to significant fluctuations, implementing the method according to any of preceding claims, comprising:

- means (14) for storing capacitive energy,  
- means (13) for progressively charging said capacitive storage means at a voltage higher than the nominal voltage of said battery,  
25 - means (17) for detecting a predetermined voltage threshold over the terminals of said capacitive storage means (14), and  
- means (15) for discharging said capacitive storage means into said battery, said discharging means being controlled by said threshold detection means.

5. The device of claim 4, characterized in that it further comprises filtering means (11) arranged between said direct-current source and said progressively-charging means (13).

5 6. The device according to claim 4 or 5, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

10 7. The device according to claim 6, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

8. The device of any of claims 4 to 7, characterized in that the  
15 progressively-charging means (13) comprise inductive storage means (29) cooperating with controlled switching means (28).